

## Gender Role Stereotyping in Radio Advertisements: A Portuguese and Cross-national Analysis

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*Most previous research into gender role stereotypes in the mass media has concentrated on television or print. Using content analysis, gender role stereotyping in radio commercials was examined. The goals of the study were to: (1) provide current data on level and content of gender stereotyping in Portuguese radio advertising; (2) compare levels of stereotyping in three countries. One hundred and sixty six advertisements were content analyzed into nine categories referring to the central figure, credibility, role, location, argument, reward, product, accent, and narrator. As previously found, male and female characters were portrayed in different ways particularly on credibility (males as authorities, females as users), role (males as celebrities/narrator, females as dependent), location (males in occupational setting more than females), and narrators (females as characters more than males). The patterns of bias in Portuguese radio commercials are consistent with, though less marked than, those in television commercials. Concerning the cross-national analysis, results showed more similarities than differences.*

The mass media impact on our daily lives in a variety of ways, often without our conscious awareness. We are bombarded by visual and auditory stimuli from the media throughout the day. We hear music, news, and advertising at our office desks, in elevators, while jogging or driving to and from school or work. Advertisements in buses and subways shout out the newest, best, modern, and most efficient products and services available.

Critical theory and cultural studies emphasize the central role of advertising in the formation of our symbolic reality (Kellner, 1995; Schudson, 1993). In Western culture, socioeconomic reality and the symbolic reality presented by

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the advertising world are related. Kellner (1995) observed that "all ads are social texts that respond to key development during the period in which they appear" (p. 334).

One specific area of value transmission in advertising has been the study of gender role portrayals (Courtney & Whipple, 1983). Researchers' interest in this area results from a variety of factors, the most important being that marketers use gender as a primary segmentation variable and that social scientists use advertisements to examine gender stereotyping in the media. Gender stereotypes (Neto, 1997; Neto, Williams, & Widner, 1991) are as present in print media as they are in auditory and visual media. The purpose of this study is to contribute to the monitoring of contemporary media by extending attention to a form of broadcasting that has been little studied: radio.

With the rise of television following the Second World War, there was fear that radio might disappear. Radio survived as the result of an extraordinary adaptation: The medium entirely changed its format, to supplement rather than directly compete with TV. People listen when they wake up in the morning, while they are working, driving, eating, playing, and today, surfing the net. But when evening comes, and they settle down in their living rooms, the radio dial is turned off in favor of the TV. Nevertheless, radio remains one of the most massive of our mass media forms in terms of the ownership sets.

Radio is available in virtually every location and at any time of the day or night. It can be a group or solus activity. The intensity of listening covers a wide spectrum, from passive listening to other people's sets and their choice of stations throughout to a personal, trusted relationship with its user. Radio has always been of key importance to its listeners and is growing in importance as an advertising medium (Robinson, 2000). Ad avoidance was lowest for radio (Speck & Elliot, 1997). Findings suggest that radio carries informative advertisements, more than magazines and television, and equally with newspapers (Pasadeos, Shoemaker, & Campbell, 1992). But consumer studies show that radio advertisements are perceived as less informative than newspaper advertisements (e.g., King, Reid, Tinkham, & Pokrywczynski, 1987).

The first radio broadcasts in Portugal took place in 1925, but the Portuguese broadcasting company, "Emissora Nacional" was created only in 1935. Currently the radio equipment tax is high in Portugal. It is believed that most of the Portuguese people have at least one radio set, and of these, a significant percentage possesses a car radio. This is a more recent phenomenon that is gradually becoming frequent.

The number of local radios proliferated significantly in the past 2 decades. The majority of these radios are connected with the national radio system for receiving news, important football games, and other significant events. Advertising in these media is almost exclusively for the local commerce.

The average radio audience in Portugal also varies during the day and according to the days of the week (Brochand, Lendrevie, Rodrigues, & Dionísio,

1999). From Monday to Friday, the average radio audience rate is placed around 9.0%. This value decreases to 6.5% on Saturdays and to 6.0% on Sundays. The hours of higher audience rates are between 8:00 and 8:30 a.m. (covering commuting times to work by car), between 11:30 a.m. and midday and between 4:00 and 4:30 p.m. (During this period radio is mainly heard by people that work at home and by students.) In 1998 radio represented 8.0% of the total advertising investments.

During the 1970s and 1980s, Portugal experienced substantial increases in the proportion of women in the workplace. In 2000, the female employment rate was 44.9% (Instituto Nacional, 2001). In the context of the European Union, Portugal is one of the countries with the highest female activity employment rate. The Government strengthened legislation to prohibit gender discrimination and appointed a CIDM (Comissão para a Igualdade e Direitos da Mulher) whose office constitutes the governmental mechanism to assure equality of opportunities and rights. Surveys of family roles indicate some shifts in the patterns of the division of household labor. In 1997–1998, women constituted 56.0% of students enrolled in college. In sum, in recent decades Portugal has experienced ideological, political, and economic pressures concerning gender roles similar to those of other Western nations, and in this context it is of interest to assess the extent to which the mass media have responded to developments in the surrounding society. Portuguese radio is listened to in Portugal and by large populations in other countries (African countries speaking Portuguese and Portuguese emigrants around the world).

The purpose of this research is to explore the nature of gender stereotypes in Portuguese radio advertising and to compare the extent of gender-role stereotyping in Portuguese commercial radio content with that recently analyzed in Portuguese commercial television content (Neto & Pinto, 1998) and with commercial data from two other countries, Australia and Great Britain. The research reported here contributes to the literature by updating prior research and testing its generalizability with a cross-country comparison.

Television commercials have been studied in detail because, in America, they can occupy as much as one fifth of total broadcasting (Courtney & Whipple, 1983). McArthur and Resko (1975) found that overall men appeared more often than women in television advertisements and that men and women differed in terms of credibility (men being authorities and women users), role (women portrayed in terms of their relationship to others and men in a role independent of others), location (men shown in occupational settings and women in the home), persuasive arguments (men gave more "scientific" arguments than women), rewards (women were shown obtaining approval of family and males, while men obtained social and career advancement), and product type (men were authorities on products used primarily by women). Recognition of the potential influence of television commercials on gender-role development has

spurred a continuing interest in monitoring the degree of gender-role stereotyping in commercials during the past 3 decades (Furnham & Mak, 1999).

Neto and Pinto (1998) examined the portrayal of men and women in a sample of Portuguese television commercials. Three hundred and four evening commercials were content analyzed. The attributes of each of their central figures were classified into 11 categories: gender, mode of presentation, credibility, role, location, age, argument, reward type, product type, background, and end comment. The results indicated that men and women appearing in this sample were not portrayed in independent ways. The nature of these associations were systematic and in line with traditional gender-role stereotyping. These findings revealed that Portuguese television commercials manifest traditional gender role stereotypes very similar to those found in studies conducted in Western countries. It is interesting to note, however, that sex stereotyping appears to be much less prevalent in children's advertisements (Furnham, Abramski, & Gunter, 1997; Neto, submitted).

In the context of a review of television studies, Durkin (1985) suggested that regular monitoring of the media would be useful to chart continuities and changes over time and to provide a basis for examination of the relationships between the media and their societies. Furnham and Schofield (1986) pointed out that there is an additional need to investigate the contents of other primary mass media, such as radio, which accounts for a large proportion of many people's daily media usage. These authors compared the extent of gender role stereotyping in commercials on British radio with that of commercials on television content by Manstead and McCulloch (1981) using the original coding categories. They found that in radio advertisements, men were more often portrayed as "authorities on products" and women as "users" of products; men were more likely to be portrayed as "narrators or celebrities" than women; and women were more likely to be portrayed in the "home" than men. Manstead and McCulloch (1981) found significant differences in nearly all of their eight content-analytic categories, whereas Furnham and Schofield (1986) found significant differences in less than half of the categories and concluded that, compared with advertisements on British television, British radio advertisements were gender role stereotyped in fewer dimensions.

Hurtz and Durkin (1997) have pointed out that this has been the only radio-based gender role content analysis. They replicated the study using 100 Western Australian radio advertisements. They found that males were more often central characters; more often in authority roles. Females were most often portrayed in dependent roles and in their home, while they were portrayed as customers or girlfriends in the workplace. Only one of their analyses yielded a different pattern from the Furnham and Schofield (1986) data: In the British data, females were more likely to portray "characters" than males, whereas the reverse was true for the Australian data.

Furnham and Thompson (1999) updated the Furnham and Schofield (1986) study. They examined the portrayal of men and women in two different samples of British radio advertisements. One hundred advertisements from each radio station were content analyzed. On both radio stations women were significantly more likely to be portrayed promoting products for self-enhancement and with bodily health, domestic products, and food.

Even less study appears to have been done on gender roles on radio than in other mass communication media; the studies previously reviewed have shown that men and women are also portrayed in stereotypical fashion suggesting that radio is consistent with other media in their role stereotyping. Yet compared with similar studies of television advertisements, there were fewer significant differences in the portrayal of male and female characters.

Because the effects of stereotypes have been suggested to be detrimental (e.g., Jennings, Geis, & Brown, 1980), the extent of their presence in other cultures warrants examination. As the previous studies on gender role stereotyping in radio advertisements have been conducted among Anglophone countries, the current study has been conducted in a country with a different language, Portuguese, to examine in this cultural context the generalizability of the previous findings. The issue of cross-national variation in gender stereotyping in radio advertising has been particularly neglected. Comparisons of stereotyping across nations contribute to a better understanding of stereotyping and its relationship to cultural factors.

Thus this study focuses also on cross-national similarities and differences in gender-role portrayal in radio advertisements comparing findings of the current study with earlier advertising research in Australia and Great Britain. Two kinds of previous evidence allow us to expect more cross-cultural similarities than differences in gender stereotyping in radio advertising among the three countries. The first previous evidence indicates many cross-cultural similarities in the traits ascribed to men and women (Williams & Best, 1990). For example, the mean common variance among all possible combinations of the 25 countries in this large cross-cultural study was 42.0%, and the common variance between Portuguese data and those from the 25 countries was 61.0% (Williams, Best, Ward, & Neto, 1990). The second previous evidence indicates that clear patterns arise that attest to the universality of sex-role stereotyping in television commercials from 14 studies conducted in Australia, France, Denmark, Great Britain, Hong Kong, Indonesia, Italy, Kenya, Mexico, Portugal, and the United States (Furnham & Mak, 1999).

In light of previous research the following hypotheses are proposed:

- (a) Gender stereotyping in Portuguese radio advertisements is consistent with that of Portuguese television advertisements.
- (b) In comparison with Portuguese television advertisements, Portuguese radio advertisements are gender-role stereotyped on fewer dimensions. This

hypothesis is in line with previous research. For example, Furnham and Schofield (1986) concluded that "in comparison with British television advertisements, British radio advertisements are sex-role stereotyped on fewer dimensions" (p. 169).

(c) Gender stereotyping in radio advertisements are more similar than different among countries.

## **METHOD**

### **Sample of Commercials**

Advertisements were recorded randomly (just one radio station was recorded at each time period) from three different national radio stations (*Rádio Renascença*, *Rádio Cidade*, *Rádio Comercial*) between the times of 7:30–9:30 a.m., 2:30–4:30 p.m., and 7:30–9:30 p.m., from January 31, 2000, until February 18, 2000. The stations were chosen because they were the most popular commercial radio broadcasters in the country in the most recent trimester of 1999, according to Bareme-Radio from Marktest. This agency has contributed to the knowledge of the behavior of Portuguese people about radio since January 1994.

A total of 446 advertisements was initially recorded but 280 of these were repeats of advertisements already recorded and were therefore excluded from the sample. The final sample of 166 advertisements was used for coding.

### **Coding Procedure**

We conducted content analysis to gain basic information on the content of the commercials in radio's programs. Content analysis is a procedure for classifying qualitative information to obtain data amenable to quantitative manipulation. This method was chosen because it is deemed best at giving "a scientific, quantitative, and generalizable description of communications content" (Kassarjian, 1977, p. 10). Variables were drawn from previous research on gender stereotyping in commercials. Before being included on the coding form, they were pretested to ensure that they adequately reflected the content of the commercials.

The coding system employed was modeled closely on that used by McArthur and Resko (1975), Furnham and Schofield (1986), Hurtz and Durkin (1997), and Furnham and Thompson (1999). Two trained coders, one male and one female, independently coded the characteristics of each central figure presented in the commercials. They both coded 100% of the advertisements and the overall error rate of discrepancies was 5.0%. This high level of agreement was similar to previous radio content analyses (Furnham & Schofield, 1986; Furnham & Thompson, 1999; Hurtz, & Durkin, 1997). For each specific variable, the percentage of agreement was as follows: 100% for central figure, accent, and narrator, 97% for credibility, 94% for arguments, 93% for reward type and

product type, 90% for location, and 88% for role. The characteristics of each central figure depicted in the advertisements were coded according to the sex of the central figure and the eight variables of credibility, role, location, arguments, reward type, product type, accent, and narrator. Adults playing a central role, namely main speaking parts, in an advertisement were classed as central figures. No more than two central figures were depicted, those featured most prominently were selected for further coding.

The nine attributes presented in Table 1 are: *Central Figure* (whether key person in the advertisements was male or female); *Credibility Basis* (whether central figure in advertisements was a product "user," an "authority" or information source, or neither of these things); *Role* (whether central figure in advertisements was "dependent," "narrator/celebrity," "professional," or "other"); *Location* (whether central figure in advertisements was depicted in "home," "occupational setting," or "other"); *Arguments* (whether central figure in advertisements presented "scientific" or factual evidence, "non-scientific" or opinions or testimonials, and "none"); *Reward Type* (whether central figure in advertisements presented main emphasis on "self-enhancement," "practical," "social or career development," and "other"); *Product Type* (whether central figure in advertisements involved "body/home/food," "auto/technical/occupational," "entertainment/leisure," and "other"); *Accent* (whether central figure in advertisements used "standard" Portuguese spoken in Portugal, "Brazilian" Portuguese spoken in Brazil, and "other"); *Narrator* (whether central figure in advertisements was "character," and "neutral" or narrator/presenter).

## RESULTS

The results will be presented in two steps. First, we will present the Portuguese data. Second, these Portuguese data will be compared with data from Australia and Great Britain previously collected (Furnham & Thompson, 1999; Hurtz & Durkin, 1997).

### National analysis

The total number of male and female central figures for the three Portuguese stations were calculated. The results from each of the categories rated are described in terms of their significance using a chi-square test with Yates correction when appropriate.

**Central Figures.** Of 233 central figures recorded, 184 were males and 49 were females (79% males vs. 21% females), an association that was statistically significant ( $\chi^2 = 78.22$ ,  $df = 1$ ,  $p < 0.001$ ). Ninety five of the 166 commercials had only one central figure. Table 1 shows the breakdown according to gender by the major categories of the variables.

**Credibility Basis.** Two hundred and four central figures were coded either as an authority or user of the product. Both males and females were more likely

**Table 1**  
**Comparisons of Characteristics of Men and Women in Ads in Portugal,**  
**Australia, and Great Britain (Numbers Represent Absolute Frequencies)**

	Portugal		Australia		GB	
	Men (N = 233)	Women	Men (N = 153)	Women	Men (N = 254)	Women
1. Credibility						
User	18	14	22	17	24	9
Authority	148	24	73	9	161	41
Other	18	11	25	7	15	4
	$\chi^2 = 20.1^{***}$		$\chi^2 = 16.6^{***}$		n.s.	
2. Role						
Dependent	10	14	9	8	0	2
Narrator/celebrity	110	17	52	13	161	39
Professional	52	8	44	6	17	2
Other	12	10	15	6	22	11
	$\chi^2 = 34.6^{***}$		$\chi^2 = 9.9^*$		$\chi^2 = 12.0^{**}$	
3. Location						
Home	9	9	10	8	0	2
Occupational setting	122	20	48	14	19	5
Other	53	20	62	11	181	47
	$\chi^2 = 15.0^{***}$		$\chi^2 = 7.4^*$		$\chi^2 = 7.5^*$	
4. Argument						
Scientific	19	5	43	12	126	26
Non-scientific	107	10	35	10	45	17
None	58	23	42	11	29	11
	n.s.		n.s.		n.s.	
5. Reward type						
Self-enhancement	12	9	14	6	6	10
Practical	79	16	43	8	69	11
Social/career development	13	2	23	8	43	13
Other	80	22	40	11	82	20
	n.s.		n.s.		$\chi^2 = 19.2^{***}$	
6. Product type						
Body/home/food	34	14	37	10	26	17
Auto/technical/occupational	78	16	35	5	84	12
Entertainment/leisure	61	14	32	9	63	13
Other	11	5	16	9	27	9
	n.s.		n.s.		$\chi^2 = 19.1^{***}$	
7. Accent						
Standard	131	41	104	33	180	48
Other	53	8	16	0	20	6
	n.s.		n.s.		n.s.	
8. Narrator						
Character	57	28	37	4	34	9

\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$



to be shown as "authorities" than "users." Males were much more likely to be shown as authorities than females. Eighty percent of the males were presented as authorities and only 10% as product users, whereas 29% of females were shown as product users and 49% as authorities. A significant association between gender and credibility basis was found ( $\chi^2 = 20.12$ ,  $df = 2$ ,  $p < 0.001$ ).

**Role.** The four categories "spouse," "parent," "home-maker," and "girl-friend" were pooled into one dependent category because of low numbers in these roles (Furnham & Schofield, 1986). The "narrator/celebrity" category was kept separate, as was the "professional" category. The "worker" category was included in the other category due to low numbers.

A significant association between gender of central figure and role was found in advertisements ( $\chi^2 = 34.62$ ,  $df = 3$ ,  $p < 0.001$ ). Results indicated that females were far more likely to be portrayed as dependent roles than males, with 29% of the women and 5% of the men in such roles. Males were also more likely to have a role of narrator/celebrity than females were (60% vs. 35%).

**Location.** Analysis of a  $2 \times 3$  contingency table relating gender of central figures to location category revealed a significant association ( $\chi^2 = 15.00$ ,  $df = 2$ ,  $p < 0.001$ ). Females were presented more often in the home (18%) than males (5%), whereas males were presented more often in an occupational setting (66%) than females (41%).

**Argument.** Analysis of a  $2 \times 3$  contingency table relating gender of central figure to type of argument did not show an overall significant effect ( $\chi^2 = 4.29$ ,  $df = 2$ ,  $p > 0.05$ ). Males and females were equally likely to use scientific arguments (10%). About one third of the sample's contributions involved no arguments at all.

**Reward.** Analysis of a  $2 \times 4$  contingency table relating gender of central figures to reward type was carried out but was not found to be statistically significant ( $\chi^2 = 7.58$ ,  $df = 3$ ,  $p > 0.05$ ). However, females were rewarded more in the "self-enhancement" category than males (18% vs. 7%). Males were shown to be rewarded slightly more than females in the "practical" category (43% vs. 33%).

**Product.** Because of low frequencies, the categories "body," "home," and "food" were pooled, as were "auto," "technical," and "occupational." The two categories "entertainment/leisure" and "other" were kept separate. Analysis of a  $2 \times 4$  contingency table relating gender of central figure to product again proved not to be significant ( $\chi^2 = 4.08$ ,  $df = 3$ ,  $p > 0.05$ ). However, females were more likely than males to appear in commercials for "body," "home," and "food" (29% vs. 19%). Males appeared slightly more than females in commercials for "auto, technical or occupational products" (43% vs. 33%).

**Accent.** Analysis of a  $2 \times 3$  contingency table relating gender of central figure to type of accent revealed no statistically significant association ( $\chi^2 = 3.18$ ,  $df = 2$ ,  $p > 0.05$ ). The accent is equally likely for both genders of central figures.

**Narrator.** Analysis of a  $2 \times 2$  contingency table relating gender of central figure to portrayal of characters or narrators revealed a significant association ( $\chi^2 = 11.43$ ,  $df = 1$ ,  $p < 0.01$ ). Females were more likely than males to portray characters (57% vs. 31%). Males were more likely to portray narrators than females (69% vs. 43%).

### Cross-national Analysis

It is possible to compare the present data with Australian (Hurtz & Durkin, 1997) and British data (Furnham & Thompson, 1999). The British data were analyzed in two different radio stations, but there was only one significant difference in portrayal between the two radio stations thus suggesting some generalizability of the findings (Furnham & Thompson, 1999); for our analyses these British data have been pooled. The overall results are summarized in Table 1 for the three countries in which men and women appear.

**Central Figures.** Of the 640 central figures recorded in the three countries, 504 were males and 136 females (79% males vs. 21% females). The gender of the central figures did not show a significant statistical effect over the countries ( $\chi^2 = 0.16$ ,  $df = 2$ ,  $p = 0.99$ ).

**Credibility.** In terms of credibility, significant associations are observed in two of the three countries. In Portugal and Australia, males were much more likely to be shown as "authorities" than females. In Australian ads, 77% of males and only 35% of females were presented as "authorities." In Portuguese ads, 80% of males and 49% of females were presented as "authorities." No significant associations were found in the British ads, where both males and females were more likely to be shown as "authorities" than as "users."

**Role.** Significant associations are observed in the three countries in role. In the three countries, males were more likely to have a role of "narrator/celebrity" than women, and women were more likely to be portrayed in "dependent" roles than males.

**Location.** In terms of location, significant associations were also observed in the three countries. In Portuguese and Australian ads, females were presented more often in the home than males. However, in Portuguese ads, males were presented more often in an occupational setting than females, whereas in Australian ads females and males were shown approximately as often in an occupational setting (42% and 40% respectively). In British ads nearly all the locations were coded "other."

**Argument.** No significant associations were found in any of the countries in type of argument.

**Reward.** A significant association between the gender of the central figure and type of reward was found for radio advertisements in one of the three countries. In British ads, women were more likely than men to be shown suggesting self-enhancement as reward and men more likely to be shown suggesting practicality.

**Product.** A significant association between the gender of the central figure and product type was also found in one of the three countries. In British ads, men were less likely than women to appear in advertisements for products concerning body, home, or food, but more likely to appear in advertisements for auto, technological, or occupational products.

**Accent.** No significant associations were found in any of the three countries between the central figure and accent. Most of the advertisements in the three countries used a standard accent. However, the standard accent was more present in the Australian and British advertisements (90% in both cases) than in Portuguese advertisements (74%). This is due in great measure to the Brazilian influence on Portuguese radio, as 19% of the Portuguese ads used the Brazilian accent.

**Narrator.** A significant association relating gender of the central figure to portrayal of characters or narrators revealed a significant association in two of the three countries. However, in the Portuguese ads, females were more likely than males to portray characters, whereas in Australian ads, males were more likely than females to portray characters. In the three countries, most of the advertisements were neutral (64% in Portugal, 73% in Australia, and 83% in Great Britain).

## DISCUSSION

The purpose of this study was to examine current levels of gender roles stereotyping in Portuguese national radio commercials, and to compare them to findings of previous studies conducted in other cultural settings. Hence, it would be possible to draw a picture of the current approach of Portuguese radio advertising industry to gender stereotyping.

The three hypotheses forwarded have been supported. First, the patterns of bias in Portuguese radio commercials are consistent with those in television on commercials. The current findings have shown that males and females are presented differently in Portuguese radio advertisements, and that the associations tend to be in line with traditional gender role stereotypes. These results are consistent with findings obtained in various studies of television commercials in Portugal and in other countries (Furnham, Babitzkow, & Ugucioni, 2000; Furnham & Bitar, 1993; Furnham & Mak, 1999; Furnham & Skae, 1997; Furnham & Voli, 1989; Mazzella, Durkin, Cerini, & Buralli, 1992; McArthur & Resko, 1975; Mwangi, 1996; Neto & Pinto, 1998).

In line with previous studies in which men outnumbered women (Lont, 1990), the results of this study revealed a predominance of males as central figures (79%) compared with females (21%). Males were more likely to be presented as "product authorities," females as "users." Female characters were more likely to be portrayed in "dependent roles" and in "home;" male characters were more likely to be portrayed in a role of "narrator/celebrity" and in an

"occupational setting." All of these findings replicate patterns reported in earlier studies in other cultural contexts.

Second, contrary to previous findings among adults in Portuguese television and in other countries, no significant associations were found between females and males in this study in terms of argument, reward, product, and accent. These findings are similar to those of Australian and British advertisements (Furnham & Schofield, 1986; Hurtz & Durkin, 1997), and they differ from those obtained in analyses of television advertisements, including the recent Portuguese study (Neto & Pinto, 1998), which did find significant associations between gender and these variables. Indeed, whereas the television study in Portugal found significant associations on all of their content-analytic categories (10), this radio study yielded significant associations on half of the categories.

It is interesting to note that gender stereotyping in Portuguese radio advertisements appears to be less prevalent than in television advertisements. The results of this study show a pattern between the depictions of men and women in Portuguese radio commercials that is different from what has previously been found in television in Portugal and in other countries. Thus our results support the second hypothesis that radio advertisements are less stereotyped than television advertisements. It may be concluded that, in comparison with Portuguese television commercials, Portuguese radio commercials are gender role stereotyped on fewer dimensions.

Hence the findings of this study pointed out a mixed picture. If traditional gender stereotypes emerged in this study, less stereotypical aspects emerged also. Thus partial reduction of stereotypical content may reflect rather some specificity of radio advertisements than the realization of the possible consequences of stereotyping in commercials in recent years. For instance, the results of the two studies conducted in Britain in 1986 and 1999 do not support the hypothesis that sex-role stereotyping has decreased in radio commercials (Furnham & Schofield, 1986; Furnham & Thompson, 1999). As Furnham and Schofield (1986) suggested, possible explanations for less stereotypical radio commercials than television commercials include the absence of visual cues exploited in television (such as use of a white coat to signify scientist status) or different perceptions of audience preferences among radio producers.

Third, interestingly, the results of the three countries were broadly similar, despite the countries being very different in size, religion, and history. In fact, five of the nine analyses showed a similar pattern of gender stereotyping. The similarities revealed a predominance of males as central figures, males were more likely to have a role of "narrator/celebrity" than women, females were more often presented in the home than males, and in terms of argument and accent, the association with the gender of the central figure was not significant. Portuguese and Australian ads showed also a similar pattern in credibility, reward type, and product type.

One variable that yielded discrepant findings in previous studies was the narrator category. Furnham & Schofield (1986) found that females were far more likely than males to portray characters (57% vs. 29%), whereas the corresponding figures in Hurtz and Durkin's (1997) study were 12% and 31%, respectively. The present findings are very close to the British data: 43% of females were narrators in the Portuguese study and the same percent was found in the British study, whereas 88% of females performed narrator roles in the Western Australia data. We agree that "fuller analyses might be conducted to investigate whether there are intercultural differences in the extent to which women are portrayed in narrators roles" (Hurtz & Durkin, 1997, p. 111).

In sum, although many differences between male and female characters remain and the differences transmit predominantly traditionally stereotypical images, Portuguese radio advertisements in the current study seem to be presenting a less discriminative and more equal view of the roles of men and women in the society than those of Portuguese television. These results showed above all similarities across the countries of gender role stereotypes in radio commercials.

Undoubtedly, it is necessary to monitor gender role portrayals continuously in the advertisements in a society to analyze the changes in the gender role stereotyping in radio commercials and to evaluate the compatibility of these changes with the changes in the role portrayals of the society. Studies that consider gender's changing image in commercials will be especially important. In this regard, the next stage would be to obtain longitudinal data. In addition to content analyses, qualitative evaluation of advertising is needed to ascertain the messages given about sex roles (Courtney & Whipple, 1983). Also, the impact of gender role portrayal in advertising on society must be assessed. It is not enough to verify that gender stereotypes exist; their impact also must be examined.

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